CHAPTER 2 HAWAII'S PROGRAMS AND GOALS

2.1 Hawaii's Vision and Mission Statements

The Department of Health (DOH), with the help of the Goals Communication Team, its multi-sectoral and statewide advisory group, has established vision and mission statements for Hawaii's environment. To achieve these ideals, the State seeks to develop programs that will achieve ecosystem integrity, economic efficiency, and social equity.

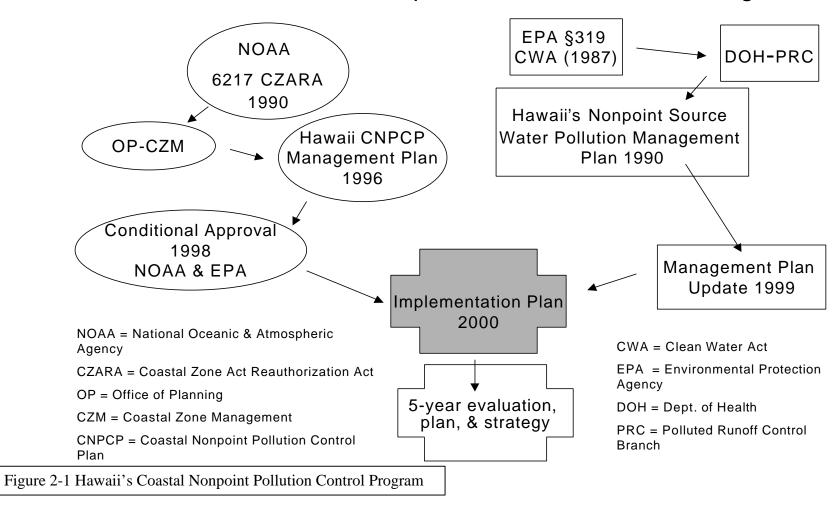
Vision Statement: An island environment that is clean and safe.

Mission Statement: Protect and enhance environmental quality for the people of Hawaii, thus preserving our quality of life.

To reach these ideals, the State seeks to improve watershed management by incorporating more holistic approaches to land, water, and ocean management. The 551 watersheds in the main Hawaiian Islands are relatively small and characterized by streams flowing rapidly from the mountains to the sea. Traditionally, Hawaiians managed these areas as whole units, known as ahupuaa, instead of functional jurisdictions that divide a watershed. The ahupuaa management system recognizes that what happens at the headwaters of streams affects ecosystems throughout the watershed and coastal waters. Given the linkages between land uses, fresh and coastal water quality, and the physical characteristics of Hawaii's watersheds, DOH and the Office of Planning have established nonpoint source pollution control programs based on the management principles of cooperation, coordination, communication, and holistic approaches – concepts that form the basis of ahupuaa management systems.

While there are numerous nonpoint source pollution control measures implemented by Federal, State and County agencies, as well as stakeholder groups, the State has established two programs that seek to coordinate efforts and encourage the development of cooperative projects and programs to control polluted runoff. One is administered by DOH's Polluted Runoff Control Program, which implements Section 319 of the Federal Water Pollution Control Act (commonly called the Clean Water Act). The other is coordinated by the Department of Business Economic Development and Tourism (DBEDT), Office of Planning's Coastal Zone Management (CZM) Program, which administers Section 6217 of the Coastal Zone Act Reauthorization Amendments (commonly called CZARA). *Hawaii's Implementation Plan for Polluted Runoff Control* is intended to integrate the coordination functions of these programs. This implementation plan will serve as a guide for the development and implementation of nonpoint source pollution control measures in the State over the next 15 years (see Figure 2-1 for a graphic representation of these processes). More specifically, the implementation plan will be used by the State to target Federal, State, and County resources towards nonpoint source pollution controls that will improve and enhance coastal water quality in the State.

Hawaii's Coastal Nonpoint Pollution Control Program



Before completing its implementation plan, the State first had to update its 1990 *Hawaii's Nonpoint Source Water Pollution Management Plan*¹ as required by the Environmental Protection Agency (EPA) by October 1999. The updated plan, which has been incorporated in this *Implementation Plan* as a part of Chapters 1-5, described the State's priorities for the next five years to significantly reduce water quality problems caused by nonpoint source pollutants. More specifically, the updated plan:

- addressed the nine key elements required by the EPA for State nonpoint source pollution control programs;
- established long and short-term goals, strategies, and schedules to control nonpoint source pollution in Hawaii; and
- established measures and schedules to evaluate the effectiveness of nonpoint source pollution controls used in the State.

2.2 State Programs

2.2.1 The Department of Health's Polluted Runoff Control Program

Located within the DOH's Clean Water Branch since 1996, the Polluted Runoff Program administers grants and programs to improve water quality in water bodies impacted by nonpoint source pollutants. The mission of the program is to:

Protect and improve the quality of water resources for enjoyment of and use by the people of Hawaii through preventing and reducing nonpoint source pollution, balancing health, environmental, economic and social concerns.

The Mission Statement of the Program is consistent with the Clean Water Branch's mission which is:

To protect the public health of the residents and tourists who recreate and place a constant demand on the coastal and inland water resources and to also protect and restore inland and coastal waters for marine life and wildlife.

The Clean Water Branch's mission is accomplished through statewide coastal water surveillance and watershed environmental management using a combination of permit issuance, monitoring, enforcement, sponsorship of polluted runoff control projects, and public education. Chapter 342E, Hawaii Revised Statutes² establishes nonpoint source pollution management and control within the DOH and defines such terms as "nonpoint source pollution," "point source pollution," and "State waters."

The Polluted Runoff Program administers grants for projects that prevent, control, and/or reduce pollution that enters inland or marine waters. It also seeks to restore water bodies, known

2 See Appendix A-3.

¹ See Appendix A-2.

as Water Quality Limited Segments, where water quality standards cannot reasonably be attained or maintained without additional action to control nonpoint sources of pollution. These water bodies were originally identified in *Hawaii's Assessment of Nonpoint Source Pollution Water Quality Problems* in 1990. The State's list of Water Quality Limited Segments is updated every two years by the DOH and is referred to as the Clean Water Act Section 303(d) list. The Polluted Runoff Control Program targets a portion of its Clean Water Act Section 319 grants to address water quality problems in these water bodies.

2.2.2 The Office of Planning's Coastal Zone Management Program

The DOH is also working closely with DBEDT's Office of Planning to develop and implement Hawaii's Coastal Nonpoint Pollution Control Program. Other states have a nonpoint source pollution control program for areas impacting coastal waters and another program for inland watersheds. Often these programs are led and implemented by separate agencies. Because all lands in Hawaii have the potential to impact coastal waters, the State seeks to develop a single, coordinated program to address nonpoint source pollution with the DOH and the Office of Planning designated as the lead coordinating agencies. These efforts are consistent with the State's Coastal Zone Management Act, which defines the coastal zone boundary as "all lands of the State and the area extending seaward from the shoreline to the limit of the State's police power and management authority, including the United States territorial sea" (Hawaii Revised Statutes, 205A-1). Because the DOH and the Office of Planning have different responsibilities and Federal funding sources – Section 319 of the Clean Water Act and Section 6217 of the Coastal Zone Act Reauthorization Amendments, respectively – they will maintain separate programs. Nevertheless, both lead agencies will use a single document, Hawaii's Implementation Plan for Polluted Runoff Control, as a guide to coordinate statewide efforts to control nonpoint source pollution.

Hawaii Revised Statutes, Chapter 205A established Hawaii's CZM Program. The Program is responsible for ensuring that the activities and authorities of Federal, State and County agencies are consistent with the objectives and policies contained in Chapter 205A. The objectives and policies reflect the State's goal of balancing economic growth with the protection and sustainable use of coastal resources and ecosystems. Thus, the CZM Program is an umbrella agency that builds on existing authorities and relies on a network of authorities and partnerships for the implementation of these policies and objectives.

The Hawaii CZM Program, with assistance from the DOH, prepared *Hawaii's Coastal Nonpoint Pollution Control Program Management Plan*³ and submitted the plan to the National Oceanic Atmospheric Administration and the EPA in 1996 for review and approval. These Federal agencies conditionally approved Hawaii's Management Plan in 1998 and set conditions that the State must meet by 2003. (See Appendix A-5 for the full text of the "Findings" document.)

Hawaii's Coastal Nonpoint Pollution Control Program Management Plan contains 57 management measures grouped into six categories - agriculture, forestry, urban areas, marinas and recreational boating, hydro-modification, and wetlands and riparian areas. It also identifies critical coastal areas in need of additional nonpoint source pollution controls; provisions for public participation; descriptions of administrative coordination; and monitoring and tracking techniques. In addition, the management plan includes recommendations to improve nonpoint source pollution within each of the above categories and describes watershed management efforts being implemented in the State.

2.3 County Programs

The Counties implement numerous nonpoint source pollution control measures in the State. In the Counties of Kauai, Maui, and Hawaii, the Departments of Public Works and Planning Departments have the authority to issue permits and implement ordinances that contain polluted runoff controls. These functions are also performed by the City and County of Honolulu's Department of Environmental Services and the Department of Planning and Permitting. *Hawaii's Coastal Nonpoint Pollution Control Program Management Plan* provides more information about these authorities.

2.4 Federal Programs

2.4.1 Section 319 of the Clean Water Act

Following the amendment of the Clean Water Act in 1987, Hawaii established a Nonpoint Source Pollution Management program as called for in Section 319 of the Act. In 1990, the State submitted *Hawaii's Nonpoint Source Water Pollution Management Plan* to the EPA that described:

- (1) best management practices and measures to reduce pollutants from nonpoint sources;
- (2) programs and funding assistance to support the implementation of the best management practices; and
- (3) a schedule for implementing the best management practices including annual milestones and the utilization of available program funding resources (CWA §319(b) (A-E)).

To comply with Section 319, the State seeks to continue to:

- (1) update its list of Water Quality Limited Segments;
- (2) identify categories of nonpoint source pollution that keep these areas from meeting water quality standards;
- (3) describe processes to identify best management practices and measures for reducing these categories of nonpoint source pollution; and
- (4) identify and describe state and local programs that control nonpoint source pollution entering these Water Quality Limited Segments and improve water quality (CWA §319(a)(1)(A-D)).

2.4.2 Section 6217 of the Coastal Zone Act Reauthorization Amendments

Section 6217 of the Coastal Zone Act Reauthorization Amendments calls for States to "develop and improve management measures for nonpoint source pollution to restore and protect coastal waters, identifying State and County authorities and non-regulatory programs designed to control nonpoint source pollution" (§6217(a)(1)). The National Oceanic and Atmospheric Administration and the EPA issued a guidance document that listed management measures that these Federal agencies expect States to follow in order to comply with Section 6217.

2.4.3 Clean Water Action Plan

The *Clean Water Action Plan*⁴ was formulated by Federal agencies in response to a directive from the Clinton Administration on the 25th anniversary of the Clean Water Act. The plan provides a blueprint for restoring and protecting the nation's waters to achieve the original goal of the Clean Water Act, which is to ensure that the waters of the nation are "fishable and swimmable" for all Americans.

Published in 1998, the Clean Water Action Plan focuses on four major themes to achieve clean water goals, which include:

- a watershed management approach;
- strong federal and state standards;
- natural resource stewardship; and
- informed citizens and officials.

The plan commits Federal agencies to support locally led partnerships with a broad array of members to meet clean water and public health goals; to increase financial and technical assistance; and to help restore and sustain the health of aquatic systems on a watershed basis. It also commits Federal natural resource agencies to support the watershed approach and to work with states for the enhancement of critical natural resources essential to clean water.

2.4.4 Unified Watershed Assessment

One of the key elements in the Clean Water Action Plan is a cooperative approach to watershed protection called the Unified Watershed Assessment. This approach calls for all levels of governments and the public to identify watersheds with the most critical water quality problems and to work together to focus resources and implement effective strategies to solve the problems.

In response to the Clean Water Action Plan, the State prepared *The Hawaii Unified Watershed Assessment*⁵ that identifies priority watersheds where the State intends to focus resources to improve water quality. Chapters 4 and 5 of this document provide more details about the State's priorities.

⁴ See Appendix A-6.

⁵ See Appendix C.

2.5 State Goals

To continue to receive Federal funds for nonpoint programs, the State's Polluted Runoff Control program must achieve the nine key elements established by EPA (Figure 2-2). The first key element calls for the State to have explicit short and long-term goals. The State has established three long-term goals with a series of short-term goals, action items, and measures of success for each long-term goal. These long-term goals include:

- a goal established by the DOH's Goals Communication Advisory Group for Hawaii's coastal waters (see Appendix B for a list of members);
- a goal to improve water quality in the State's Water Quality Limited Segments; and
- a goal to fully implement management measures for six categories of nonpoint source pollutants.

Figure 2-2. Nine Key Elements

<u>Key Element #1</u>: Explicit short- and long-term goals, objectives, and strategies to protect surface and ground waters.

<u>Key Element #2</u>: Strong working partnerships and collaboration with appropriate State, interstate, Tribal, regional, and local entities (including conservation districts), private sector group, citizen groups, and Federal agencies.

<u>Key Element #3</u>: A balanced approach that emphasizes both statewide nonpoint source programs and on-the-ground management of individual watersheds where waters are impaired or threatened.

<u>Key Element #4</u>: The State program (a) abates known water quality impairment resulting from nonpoint source pollution and (b) prevents significant threats from present and future nonpoint source activities.

<u>Key Element #5</u>: An identification of waters and watersheds impaired or threatened by nonpoint source pollution and a process to progressively address these waters.

<u>Key Element #6</u>: The State reviews, upgrades, and implements all program components required by section 319(h) of the Clean Water Act, and establishes flexible, targeted, iterative approaches to achieve and maintain beneficial uses of water as expeditiously as practicable.

<u>Key Element #7</u>: An identification of Federal lands and activities that are not managed consistent with State nonpoint source program objectives.

<u>Key Element #8</u>: Efficient and effective management and implementation of the State's nonpoint source program, including necessary financial management.

<u>Key Element #9</u>: A feedback loop whereby the State reviews, evaluates, and revises its nonpoint source assessment and its management program at least every five years.

2.5.1 Long-term Goal #1

Ensure that Hawaii's coastal waters are safe and healthy for people, plants, and animals and protect and restore the quality of Hawaii's streams, wetlands, estuaries, and other inland waters for fish and wildlife, recreation, aesthetic enjoyment and other beneficial uses by 2013.

Short-term Goals		Timeframe
1.	Develop statewide strategies to restore and maintain protected	Phase I by 2003
	uses for inland and marine waters through a phased approach	Phase II by 2008
	and assess the Statewide strategy.	Phase III by 2013
2.	Review and update the classification and beneficial uses for	By 2003
	marine and inland water quality standards.	
3.	Increase the use of Best Management Practices and assess their	By 2003
	effectiveness.	
4.	Continue to support and encourage a variety of education	Annually
	programs by increasing the number of people participating in	
	educational programs and assessing the effectiveness of the	
	programs within the Section 319(h)-grant cycle.	
5.	Assist in the implementation of the Clean Water Action Plan	By 2002
	and the U.S. all Islands Coral Reef Initiative Strategy and assess	
	their impacts on water quality.	

Action Items/Activities

- 1. Phased approach: The State will pursue a series of five-year plans to achieve the long-term goal by 2013. The 1999 update of the State's Nonpoint Source Management Plan will be incorporated into *Hawaii's Implementation Plan for the Control of Nonpoint Source Pollution* by July 2000. The State intends to update this plan and strategies every five years (2003, 2008, and 2013).
- 2. Water Quality Standards: Complete revisions to classifications and beneficial uses in the State's water quality standards for inland and marine waters by 2001.
- 3. Best Management Practices (BMPs): Since the completion of *Hawaii's Nonpoint Source Water Pollution Management Plan* in 1990, the State has focused on the development of BMPs, priority projects, educational programs, and monitoring. The State will continue to develop BMPs for various land uses starting with land uses most likely to have a negative impact on water quality. More specifically, the State will in the next five years:
 - a. continue to work closely with the Counties to develop and monitor the use of BMPs in urban areas;
 - b. continue to work closely with the Soil and Water Conservation Districts to develop and evaluate the effectiveness of BMPs in agricultural areas with an emphasis on soil erosion control and nutrient management;

- c. promote the restoration and stabilization of highly erodible areas through the use of BMPs and improved land management controls;
- d. promote and expand the use of BMPs demonstrated to be effective (DOH Strategic Plan); and
- e. develop mechanisms to track BMP implementation.
- 4. Educational Programs: The State has developed and implemented numerous successful educational programs. The State will continue to implement educational programs in the following categories:
 - a. education and outreach efforts targeted to the general public;
 - b. education and outreach efforts targeted to students;
 - c. education and outreach efforts targeted to land users and industry; and
 - d. education and outreach efforts targeted to specific cultural groups.
- 5. Clean Water Action Plan and Coral Reef Initiative:
 - a. continue to pursue inter-agency cooperative arrangements to facilitate the implementation of these initiatives;
 - b. submit recommended projects to the Coral Reef Task Force by November, 1999;
 - c. support projects to reduce nonpoint source pollutants that adversely impact coral reef ecosystems; and
 - d. provide feedback to Federal agencies regarding the effectiveness for these initiatives by 2002.

Measures of Success

- 1. Evaluation of the effectiveness of Hawaii's Coastal Nonpoint Pollution Control Program every 5 years.
- 2. Improved water quality in areas monitored for nonpoint source pollutants. Decrease in the number of beach closures due to nonpoint source pollutants.
- 3. Ten percent increase in the percentage of lands operated under BMPs, conservation plans, and other conservation programs. Ten percent increase in the use of effective BMPs statewide. Establishment of a management system to track the use and effectiveness of BMPs. Improved water quality in water bodies threatened by nonpoint source pollutants, but not yet on the State's 303 (d) list.
- 4. Evidence of increased knowledge of polluted runoff sources among targeted groups. Ten percent increase in number of participants in Polluted Runoff Control outreach activities. Ten percent increase in the number of volunteers participating in watershed activities or other community cleanup projects.
- 5. Measurable improvements in coral reef ecosystem health in areas with increased nonpoint source pollution controls.

2.5.2 Long-term Goal#2

Identify impaired water bodies and restore their designated uses through a Statewide approach to watershed management within 15 years.

		Timeframe.			
Sno	Short-term Goals				
1.	Following a phased approach, develop and implement	Phase I by 2003			
	watershed management plans and assessments for Category I	Phase II by 2008			
	watershed regions as identified in the State's Unified	Phase III by 2013			
	Watershed Assessment. The State will target projects in the				
	five priority watershed regions within five years; second tier				
	Category I watersheds region within ten years; and any				
	additional watershed regions in need of restoration within				
	fifteen years. ⁶				
2.	Complete the categorization and prioritization of all watershed	By 2003			
	regions as part of the State's Unified Watershed Assessment within				
	five years.				
3.	Implement watershed restoration action strategies and	Phase I by 2003			
	implementing plans and test the effectiveness of best management	Phase II by 2008			
	practices under different conditions.	Phase III by 2013			
4.	Support watershed educational programs in priority watersheds	Annually			
	and evaluate their effectiveness.				
5.	Establish water quality monitoring programs in Category I	By 2004			
	watersheds.				
6.	Complete Total Maximum Daily Loads for section 303(d) listed	2012			
	waters.				
7.	Update and implement water quality monitoring objectives,	2004			
	strategies, and methodologies (DOH Strategic Plan).				

Action Items/Activities

- a. develop watershed assessments and plans that address the major sources of nonpoint source pollution in the five priority watersheds in Category I by 2002; and
 - b. foster partnerships with other governmental, business, and nonprofit organizations in these watershed regions.
- 2. Convene inter-agency group to categorize all watershed regions in the State within two years.

⁶ Based on the watershed restoration priority setting guidance outlined in the *Final Framework for Unified Watershed Assessment, Restoration Priorities, and Restoration Action Strategies* (U.S. EPA, 1998), the State identified Category I watershed regions as those watersheds that drain into one of the State's Water Quality Limited Segments.

- 3. Watershed restoration action strategies and best management practices implementation:
 - a. begin to test and disseminate information on the effectiveness of BMPs in priority watersheds within two years;
 - b. establish mechanisms for watershed groups to meet and share information about their projects within three years; and
 - c. support demonstration projects relating to nonpoint source control.

4. Educational program implementation:

- a. continue to encourage 319(h) grant proposals for educational projects, especially for projects in priority watersheds;
- b. continue to disseminate information from successful educational projects to other watersheds;
- c. support *farm-a-syst* and *home-a-syst* projects for the State and target the use of these materials in priority watersheds within three years;
- d. continue to promote community-based watershed management through education and voluntary compliance; and
- e. conduct a watershed management workshop within two years.
- 5. Implement water quality monitoring programs in the five priority watershed regions by 2003.

6. Total Maximum Daily Loads (TMDLs) Schedule:

- a. prepare a schedule to complete TMDLs for section 303(d) listed waters by the end of 1999, with annual review and modifications, if necessary;
- b. complete TMDL demonstration project in Waimanalo by 2001;
- c. develop a strategy and appropriate methodologies to address TMDLs for waters listed on the State's section 303(d) by 2002;
- d. select one or two water bodies each year and prepare a TMDL and identify management measures needed to improve the quality of the listed water body; and
- e. complete TMDLs for section 303(d) listed water bodies by 2012, if adequate funding is available and effective methodologies are developed.

7. Water Quality Monitoring:

- a. complete Quality Assurance Quality/Control plan by the end of 1999;
- b. on a biennial basis and with assistance from the EPA, update Hawaii's section 303(d) listed waters;
- c. establish baseline data for toxic chemicals for the purpose of adopting standards to control waste discharges (DOH Strategic Plan);
- d. determine the percentage of assessed rivers and estuaries with healthy aquatic communities (DOH Strategic Plan);
- e. assess the impact of streams entering recreational beaches through a joint monitoring program with the City and County of Honolulu and address the problem at the source (DOH Strategic Plan);
- f. develop protocols and resources in cooperation with the University of Hawaii to monitor pathogens in polluted runoff and waste water (DOH Strategic Plan);

- g. develop partnership with the community through a water quality monitoring program using volunteers from various neighborhoods in the State (DOH Strategic Plan);
- h. prepare a biennial report on the overall condition of the State's recreational waters and submit to the EPA (DOH Strategic Plan);
- i. increase the number of chemical and biological databases to develop scientifically valid criteria (DOH Strategic Plan); and
- j. establish institutional measures that promote and increase DOH efforts to use innovative technologies, methods, and procedures in assessment of human health risks associated with water quality (DOH Strategic Plan).

Measures of Success

- 1. Increase in the number of Memorandums of Agreement and other instruments documenting partnerships among agencies and stakeholder groups. Degree of sustainability of partnerships.
- 2. Completed classification of the State's watershed regions with interagency agreements to work in priority areas.
- 3. Measurable water quality improvements in Water Quality Limited Segments. Number of projects implemented as identified in watershed restoration action strategies. Level of commitment to fully implement watershed restoration action strategies.
- 4. Increase in the number of participants in watershed projects. Increase in watershed education programs in priority watershed regions. Number of participants using materials from the Hawaii Pollution Prevention Information project. Evidence of changes in individual and land users' behaviors indicating knowledge of polluted runoff control measures.
- 5. Increase in water quality data collected in priority watershed regions.
- 6. Measurable water quality improvements in Water Quality Limited Segments.
- 7. Improved methodologies for water quality monitoring. Establishment of a system to link the effectiveness of management practices in the watershed to water quality improvements.

2.5.3 Long-term Goal #3

Develop and implement economically achievable management measures, as identified in Section 6217 of the Coastal Zone Act Reauthorization Amendments, which are appropriate to Hawaii's physical, economical, cultural, and social environment by 2013.

Short-term Goals		Timeframe
1.		2000
2.	Following a phased approach, prioritize management measures and focus implementation efforts.	Phase I by 2003 Phase II by 2008 Phase III by 2013
3.	Have the Attorney General conduct a review of the State's enforceable policies and mechanisms for polluted run-off control.	By 2000
4.	Based on the Attorney General's review, prepare a strategy to address gaps in enforceable policies and mechanisms.	By 2000
5.	Receive program approval of the State's Coastal Nonpoint Pollution Control Program from the National Oceanic Atmospheric Administration and the EPA.	By 2003

Action Items/Activities

- 1. Develop a 5-year Implementation Plan and a 15-year strategy for the six nonpoint categories identified in *Hawaii's Coastal Nonpoint Pollution Control Program* (Agriculture, Forestry, Urban Areas, Marinas and Recreational Boating, Hydromodifications, and Wetlands). This plan and strategy will include:
 - a. a description of regulatory and non-regulatory (incentive-based) programs the State will use to implement management measures;
 - b. a description of the process that links the incentive-based program with back-up enforcement authorities; and
 - c. a description of the methods the State intends to use to evaluate the effectiveness of management measure implementation.

The State will complete a draft of the 5-year Implementation Plan and conduct public meetings on all the major islands by December 1999. The final version of the plan (this document: *Hawaii's Implementation Plan for Polluted Runoff Control*) will be prepared by August 2000.

2. Based on the strategies and priorities identified in *Hawaii's Implementation Plan for Polluted Runoff Control*, the State will address the 57 management measures in phases. The State intends to focus on 20 management measures in Phase I, another 20 in Phase II, and the remaining management measures in Phase III. Management measures will be prioritized

based on State and County priorities, stakeholder input, and Federal guidance. Current State priorities are focused on agricultural and urban area management measures. The availability of funds and technical assistance will influence the pace at which the State implements the management measures.

Towards the end of each 5-year phase, the State will:

- a. evaluate the progress made in the previous 5 years;
- b. prepare a 5-year implementation plan for the next phase; and
- c. evaluate and update the State's 15-year strategy.
- 3. The State's Attorney General will review State statutes to determine if such authorities can be used to prevent nonpoint pollution and require management measure implementation. The State will initiate this review in 2000.
- 4. After completion of the Attorney General's review of State statutes, the State will develop a strategy to address identified gaps in its enforceable policies and mechanisms.
- 5. By 2003, the State will address the conditions placed on *Hawaii's Coastal Nonpoint Pollution Control Program* by the National Oceanic Atmospheric Administration and the EPA. The State will pursue a phased approach by addressing agriculture and urban area management measures by 2001 and forestry, marinas and recreational boating, hydromodifications, and wetlands by 2003. The State will identify critical coastal areas and develop additional management measures, if necessary, by 2003.

Measures of Success

- 1. Completed implementation plan with priority projects identified.
- 2. Number of agreements and partnerships among agencies to implement management measures in Hawaii's Coastal Nonpoint Pollution Control Program. Effective implementation of the management measures.
- 3. Completed review by the State's Attorney General.
- 4. New or revised enforceable policies and mechanisms based on the Attorney General's review and provisions in Hawaii's Coastal Nonpoint Pollution Control Program.
- 5. An approved Coastal Nonpoint Pollution Control Program for Hawaii.

While the DOH and the Office of Planning are the lead agencies for coordinating the development of Hawaii's Coastal Nonpoint Pollution Control Program, many of the State's nonpoint pollution control measures are implemented by other Federal, State, and County agencies, as well as stakeholder groups. Partnerships among these agencies and stakeholders are critical to the successful implementation of these measures.

Summary of Activities by Year

2000

- Complete a schedule to complete Total Maximum Daily Loads for section 303(d) listed waters.
- Implement water quality monitoring objectives, strategies, and methodologies (DOH Strategic Plan).
- Conduct a review, by the Attorney General, of the State's enforceable policies and mechanisms for polluted run-off control.
- Prepare a strategy to address gaps in enforceable policies and mechanisms based on the Attorney General's review.

2001

• Complete Total Maximum Daily Load - demonstration project in Waimanalo.

2002

- Continue to assist in the implementation of the Clean Water Action Plan and the U.S. All Islands Coral Reef Initiative and assess their impacts on water quality.
- Provide feedback to Federal agencies regarding the effectiveness for the Clean Water Action Plan and the U.S. All Islands Coral Reef Initiative.
- Develop a strategy and appropriate methodologies to address Total Maximum Daily Loads for waters listed on the State's section 303(d).

2003

- Receive program approval of the Hawaii's Coastal Nonpoint Pollution Control Program from the National Oceanic Atmospheric Administration and the EPA.
- Prioritize management measures and focus implementation efforts following phased approach.

2004

- Complete revisions to classifications and beneficial uses in the State's Water Quality Standards for inland and marine waters.
- Develop and implement watershed management plans and assessments for Category I watershed regions as identified in the State's Unified Watershed Assessment.
- Develop statewide strategies to restore and maintain protected uses for inland and marine waters through a phased approach and assess the statewide strategy.
- Review the classification and beneficial uses for marine and inland water quality standards.
- Implement Quality Assurance/Quality Control Plan and follow timelines contained in the plan.
- Increase use of best management practices and assess their effectiveness.
- Establish water quality monitoring programs in Category I watersheds.

2008

- Implement watershed restoration action strategies and implementing plans and test the effectiveness of best management practices under different conditions.
- Prioritize management measures and focus implementation efforts following phased approach.

2012

- Complete Total Maximum Daily Loads for section 303(d) listed water bodies.
- •

2013

• Achieve long-term goals.

